NOAA-TM-NMFS-F/SPO-10

World Fishing Fleets

An Analysis of Distant-water Fleet Operations

Past - Present - Future

Volume II

Africa and the Middle East

LIBRARY

APR 05 1994

National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii

NATIONAL MARINE FISHERIES SERVICE
National Oceanic and Atmospheric Administration
U.S. Department of Commerce

NOAA
TM
NMFS
F/SPO
10

NMFS Honolulu Library
00000000005035

World Fishing Fleets:

An Analysis of Distant-water Fleet Operations
Past - Present - Future

Volume II

Africa and the Middle East

LIBRARY

APR 05 1994

National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii

Prepared by
U.S. Embassies overseas

Assembled by:

Frederick H. Beaudry
William B. Folsom
David J. Rovinsky

November 1993
NOAA Tech. Memo. NMFS-F/SPO-10

NATIONAL MARINE FISHERIES SERVICE
National Oceanic and Atmospheric Administration
Silver Spring, Maryland
November 1993

PREFACE

Since the Office of International Affairs, National Marine Fisheries Service does not presently have an African and Middle East Desk Officer, we were unable to provide the in-depth analysis provided in the other regional dissertations. However, at our request we did receive some outstanding reports from U.S. diplomatic posts that are provided after minor edits as the basis of this report.

A WORD ABOUT REFLAGGING

Reflagging, registering a vessel in another country, is a growing concern for fishery managers around the world. Reflagging is done for many reasons. The simplest case is a vessel owner in one country selling a vessel to a new owner in a different country. In other cases, local requirements may require all joint venture fisheries' vessels to fly the flag of one particular country. In some instances, and particularly for older and less efficient vessels, fishermen may not be able to operate profitably in one country and may reflag their vessel in another where taxes, fuel costs, and crew salaries are less onerous. While there are several major reasons for reflagging a vessel, one reason of growing concern is reflagging to avoid internationally agreed measures for the conservation and management of living marine resources. By reflagging a vessel with a country that is not a signatory to an agreement designed to manage and/or conserve living marine resources, a vessel may avoid the regulations/conservation measures for a regional area. The problem is compounded by the fact that many of the countries frequently used for reflagging simply do not have the staff to monitor the fishing operations of their flagged vessels throughout the world. The issue of reflagging is gaining international attention and is the subject of the proposed Agreement to Promote Compliance with International Conservation and Management Measures for Fishing Vessels on the High Seas approved by the Food and Agriculture Organization of the United Nations in November 1993 for ratification by interested States.

SPECIAL NOTICE: In the preparation of this report, the authors noted that in many instances reflagging simply involved the transfer of ownership from one owner to another. The reasons for other reflaggings were less clear. However, the purpose of this project was to identify ***trends*** and the results obtained through our research efforts show that reflagging has increased sharply in the last few years.

Contents

WORLD FISHING FLEETS
Africa and the Middle East
Volume 2.

1.0 Overview 1

2.0 Country Reports 1
2.1 Benin 3
2.2 The Gambia 7
2.3 Kenya 11
2.4 Mauritania 13
2.5 Morocco 17
2.6 Namibia 21
2.7 Nigeria 25
2.8 Oman 29
2.9 Senegal 35
2.10 Yemen 37

Index 43
Endnotes 49
Statistical Tables 39
Maps 47

This volume should be cited as: Beaudry, Frederick H., William B. Folsom, and David J. Rovinsky. Africa and the Middle East (fishing fleets). Published in: "World Fishing Fleets: An Analysis of Distant-water Fleet Operations. Past-Present-Future. Volume II." Prepared by the Office of International Affairs, National Marine Fisheries Service, NOAA, U.S. Department of Commerce. Silver Spring, Maryland, November 1993.

Prepared by:

Division of International Science, Development and Foreign Fisheries Analysis
The Office of International Affairs,
National Marine Fisheries Service, NOAA
U.S. Department of Commerce
1335 East-West Highway
Silver Spring, MD 20910-3225

TEL: 301-713-2286
FAX: 301-713-2313

1

OVERVIEW

African fisheries range from artisanal, canoe-based to those employing modern high-seas vessels equipped with the latest in fisheries technology. Fishing grounds also vary, from the rich grounds off Mauritania to the relatively nutrient-poor waters in the western Indian Ocean. The waters off Africa have attracted foreign fishermen for many generations, especially from former colonial powers. Beginning in the late 1950s and early 1960s, African nation's gained independence and began excluding their former colonial owners from their national waters. This process was accelerated in the 1970s as many nations around the world extended their Exclusive Economic Zones (EEZ) to 200-miles. Some former colonial powers recognized the changes sweeping the continent and negotiated bilateral fishery agreements in some of their former colonies. Some fishermen, however, continued to fish in African waters, illegally entering their waters at night -- or in daylight in some cases -- anticipating that most African countries did not have the enforcement capability to halt illegal fishing. Limited enforcement capabilities remains an important limitation in most developing nations in Africa today.

In 1977, The European Community (EC) began negotiating international fishery agreements with various African states. The first agreements simply replaced existing bilateral agreements reached between EC member states and their former colonies or they were agreements that previously existed. Agreements with Mauritania, Guinea (Bissau) and Guinea (Conakry) and Senegal were among the first agreements negotiated in West Africa. The most important agreement came in 1988 when the EC signed an agreement with Morocco allowing nearly 800 EC vessels access to Morocco's territorial waters. The EC has gradually increased the number of international fishery agreements to where, in 1993, a total of 19 agreements, valued at nearly $775 million, have been signed with African and Indian Ocean countries.[1]

African states also negotiated bilateral fishery agreements with Japan, Taiwan, and the Republic of Korea in the 1970s and 1980s. Asian fishermen were especially attracted to tuna, billfish, cephalopodes, and whitefish found in the eastern and southern Atlantic Ocean and the Indian Ocean. Agreements were also reached with Bulgarian, East German, Polish, Rumanian, and Soviet fishery authorities prior to the breakup of the USSR in the 1990s.

African countries, by and large, have not become centers for reflagging. Liberia, however, is a major flag of convenience country for martime vessels throughout the world. The authors have no information on the extent of reflagging under the Liberian flag by fishing vessels. Today, many reflagged fishing vessels are operating out of South African and/or Namibian ports.

Digitized by the Internet Archive
in 2025

https://archive.org/details/noaa-technical-memorandum-nmfs-f-spo_1993-11_10

2

BENIN

The U.S. Embassy in Cotonou, Benin, prepared the following report on the fisheries of Benin. The report has been edited only slightly to help it conform to other country reports.[2]

1. Regulations

Beninese regulations stipulate that vessels solely engaged in commercial fishing may be no more than 18 meters in length, and have an engine no larger than 235-horsepower. Vessels which catch both fish and shrimp, however, may be up to 25-meters in length and have up to 400-horsepower engines. In order to obtain a permit to fish in Beninese waters, an application must be jointly submitted to the Ministry of Rural Development and the Ministry of Transportation. This application must include: documents for the entire crew, the vessel registration certificate from the builder (certifying the length, tonnage, and age of the vessel), a registration number indicating that the vessel owner has registered with the Beninese Chamber of Commerce, and financial information about past fishing activities in Beninese waters. Once this application is submitted to the aforementioned ministries, the vessel must undergo an inspection performed by the Autonomous Port of Cotonou (PAC); this inspection seeks to ensure that both the fishing gear and the safety/navigation systems of the vessel are in working order.

Once this process is completed, the vessel owner must satisfy two financial requirements. First, a tariff must be paid to the Government of Benin (based upon the size of the vessel, capacity of equipment, planned catch of the vessel, and other factors); the minimum tariff is 5,000 CFA francs. This tariff is paid annually. Second, a bond must be posted with a Cotonou bank against the violation of Beninese fishing/environmental laws by the fishing vessel. This bond varies in amount according to the size and age of the vessel, ranging from a minimum of 300,000 CFA francs to 5,600,000 CFA francs. Though in principle fines are to be deducted from this bond for infractions, Government of Benin fishery officials reported that (in their memories) all bonds posted had been refunded in full. The U.S. Embassy was unable to verify this fact.

Finally, once the application has been approved, the vessel has been certified as sound by the PAC, and all financial obligations have been met, the vessel owner must apply for a temporary "authorization" (renewable each 30-60 days) to fish in Beninese territorial waters. This authorization is free, and (according to the Government of Benin fisheries officials), is simply to ensure that vessels wishing to fish continue to conform with Government of Benin reporting, inspecting, and local sale requirements.

2. Local Sale Requirements

The Government of Benin requires that all fish caught within the Beninese Exclusive Economic Zone (EEZ) be offloaded at port of Cotonu, for sale within Benin. Shrimp caught within Benin's EEZ, however, are exempt from this requirement. Consequentially, the licensing fees for shrimp vessels are higher than those for fishing vessels. All vessels, regardless of catch, must declare the composition of their catch and undergo an inspection at the PAC.

Not surprisingly, Government of Benin fisheries officials report that few vessels choose to endure this laborious process to become legal. In 1992, only 15 vessels were certified. This number has remained relatively stable since 1980. Most vessels are of Nigerian origin; those vessels of European origin are reportedly French, Greek, or Portuguese. The Government of Benin officials were unable to provide a precise accounting of the nationalities of fishing vessels licensed. Species chiefly fished: shrimp, lobster, tuna.

3. International Agreements

According to the Government of Benin fishery officials, there are no bilateral fishery agreements currently existing. Benin has participated in the UN Conference on the Law of the Sea, and "adheres to these regulations and precedents." Benin receives no specific tariff preferences as a result of bilateral fisheries accords. However, many Beninese export commodities (including fish) receive preferential treatment.

4. Joint Ventures

No joint ventures currently exist in Benin. Under a previous regime a joint Benin-Libyan concern existed ("hen-lyb-peche"), which was aimed at the Beninese domestic fresh fish market. This venture has since ceased to exist, however. Government of Benin fisheries officials speculate that the closing of this venture is more related to the recent change of Beninese political regimes (from Marxist-Leninist to Pluralistic Democracy) than the profitability of the enterprise.

5. Aid Programs

There are currently no fishery aid programs existent at the multilateral level, according to the Food and Agriculture Organization (FAO) of the United Nations in Benin. The United States Agency for International Development (USAID) in Benin also has no fishery projects, nor does the U.S. Peace Corps in Benin. However, the U.S. Embassy has learned of a German fisheries project, aimed chiefly at small-scale artisanal fishermen This project, situated in the Cotonou lagoon (saltwater estuary), employs one full-time paid director and several volunteers. An exact dollar figure is unavailable. Additionally, the Government of Benin received a gift of two vessels (of twelve and sixteen meters length) from the Government of Japan in 1990. These vessels are used for research purposes; one Japanese national (scientist/researcher paid by the Japanese Government) actively employs these vessels in ongoing research. Dollar figures are not available.

6. Shipbuilding

The local shipbuilding industry is virtually nonexistent. The Embassy knows of no local shipwrights capable of constructing ocean-going vessels of sufficient size to undertake commercial fishing activities. No special provisions exist within the Beninese customs code regarding the specific importation of new or used fishing vessels. Benin does give preferential customs treatment to foreign investments which meet certain criteria (local employment, size of investment, value-added nature). These criteria are outlined in chapter five of the Beninese investment code ("LOI No. 90-002 du 9 Mai 1990"). It is therefore presumed that used or new fishing vessels imported as a component of a broader package of foreign investment could enter duty-free.

7. Transhipments

Figures from the autonomous port of Cotonou indicate that, for the first nine months of 1992, 10,523 tons of frozen fish were off-loaded in Cotonou, including 2,526 tons being transshipped to Nigerian markets. This figure, however, includes fish not caught in the Beninese EEZ. As previously mentioned, the Government of Benin requires that all fish caught in EEZ be sold within the Benin market.

8. Enforcement

Benin is scheduled to receive two coastal patrol vessels (Boston Whalers) as part of the Department of Defense biodiversity program which was in existence during the past two years. These will augment the two sometimes functioning vessels of Benin's small coast guard/navy. Although we are aware of some recent seizures of illegal fishing vessels (one Greek), we have no figures on amounts seized or fines levied.

Benin

3

THE GAMBIA

The U.S. Embassy in Banjul, The Gambia, prepared the following report on the fisheries of The Gambia. The report has been edited only slightly to help it conform to other country reports.[3]

1. Regulations

All vessels fishing in Gambian waters must be licensed. Foreign vessels can be licensed to fish in Gambian waters in two ways: 1) under the term of a bilateral agreement with The Gambia, or 2) by creating a joint venture with a Gambian firm. Fishing licenses can be allocated to foreign vessels that have joint ventures with Gambian companies. The limits placed on the number of such licenses is based on the size (and therefore the approximate fishing capacity) of the vessels. There is no statutory limit on the number of licenses that can be issued. Any registered Gambian fishing company may obtain a license to fish in Gambian waters. Often Gambians sell their licenses to foreign vessels for considerable sums. Licensing fees for trawlers less than 400-horsepower (hp) is $35 per gross ton (weight of the vessel) per annum and those of 400-hp and above are charged $44 per gross registered ton (GRT) *per annum* on a *pro rata* basis. Foreign shrimpers are assessed a fee of $17 per GRT per annum. Once a vessel is licensed, there is no limit to the amount of catch that it may land.

The registration of fishing vessels is guided by the Registration of Ships Act of 1968 amended by the 1977 Act to Accommodate Fishing Vessels. Gambian registered fishing vessels must pay the following: a) initial registration fee; b) annual tonnage tax; c) harbor and ports dues; and d) survey fees. There are no restrictive regulations to protect the shipbuilding industry. Fishing licenses are issued by the Department of Fisheries. Anyone wishing to import new or used fishing vessels into Gambian waters must first obtain written permission from the Director of Fisheries. Failure to do so will result in a maximum fine of $1,163, or one year in prison. Since the fishing industry is targeted for development, the importation of fishing gear is exempt from import taxes.

2. International Agreements

The Gambia maintains bilateral agreements with both Senegal and the European Community (EC). Both agreements are mainly licensing agreements. As a result of this, vessels can be licensed to fish in the Gambian Exclusive Economic Zone (EEZ), according to the total tonnages for each class of vessel as set out in the agreement. Senegal and the Gambia have an a agreement about the number and gross tons of the other country's vessels that each country will allow to fish in its waters. EC-flagged vessels pay a fee for access to the resources, research, and training of some Gambians that are placed as observers on each vessel. From 1989 to 1992 the sums paid were $4.8 million for access rights, $100,000 for research, and $206 for training.[4]

3. Joint Ventures

The only known joint ventures in the Gambia are GB International, B.B. and Sons, and the now defunct Pelican Seafood. These are all seafood processing companies. There are no agreements that govern fishery joint ventures in the Gambia.

4. Aid Programs

There are currently only two fishery aid programs in the Gambia: the Inland Artisanal Fisheries Development Project (IAFDP) and the Japanese Bakau Project. The IAFDP, funded by the Italian Government, is an extension of the community fisheries concept. The project has storage, fish smoking and drying, and communication facilities at a number of project sites in the country. The IAFDP also extends revolving loan funds, allowing fishermen to finance engines and related gear. The recently opened Bakau project was funded by the Japanese Government at a cost of $4 million. This project, similar in nature to the IAFDP, has an ice plant capable of producing 3 tons of ice daily, a chilled storage room, and two insulated trucks (each with a 2-ton capacity). There is a proposal for the construction of a fishing port to benefit industrial fishing firms which incur delays and other problems when landing their catch at the current port at Banjul. Discussions are under way with the Japanese Government and the Islamic Development Bank for funding.

5. Shipbuilding

There is no shipbuilding industry in the Gambia and hence, commercial fishing vessels must be imported. Equipment to repair vessels must be imported. Repair facilities for vessels up to 500 tons are available in the country.

6. Foreign Fishing

The local port serves as a supply or transshipment point for distant-water fleets. It is not known with certainty the extent of the distant-water fishing taking place within the EEZ. However, it is estimated from previous aerial surveillance photos that 20-30 vessels are fishing within the 12-mile zone on any given day. Table 1 provides details on the number of vessels licensed and their country of origin from 1985 through the first half of 1993. The more popular species targeted are shrimp, lobster, cephalopods, tuna, red snapper, barracuda, sole fish and sompat grunts.

7. Enforcement

The Marine Company of the Gambia National Army is charged with patrolling and enforcing any violations of the fisheries act. Currently, their two old British-supplied vessels cannot fully patrol the EEZ. However, under the Department of Defense's biodiversity program, the U. S. Government will provide a new 51-foot patrol vessel to upgrade the Marine unit patrol capability. In some ways the separation of regulatory power under the Department of Fisheries, and enforcement under the Gambian National Army, has inhibited fisheries management, but the situation should improve. Fifty-three vessels were arrested from July 1987 to June 1992 and a total of $1,210,790 in fines imposed (see table 2).

Table 1.--THE GAMBIA. Fishing licenses issued, by country, number of vessels, and tonnage, 1985-92.

Country of Registration	Registered Vessels	Registered Tonnage
	Number	*Gross Registered Tons*
Belgium	2	301
Brazil	1	89
China	1	143
France	99	61,241
Gambia	221	55,645
Ghana	11	4,859
Greece	83	18,042
Honduras[a]	17	4,349
Italy	3	1,441
Japan	20	7,487
Kaliningrad (Russia)	4	884
Kiev (Ukraine)	3	419
Korea, Republic of	18	7,318
Latvia	2	193
Morocco	4	1,507
Nigeria	11	8,440
Panama[b]	20	6,220
Portugal	8	1,186
Senegal	176	38,311
Sierra Leone	33	8,963
Spain	237	70,047
St. Vincent[c]	4	1,368
United Kingdom	2	916
United States	10	830
Total European Community	434	153,174
TOTAL	990	300,199

Source: "World Fishing Fleet Study," U.S. Embassy, Banjul, The Gambia, June 29, 1993.

[a] Presumably reflagged vessels.

[b] Presumably vessels reflagged in Panama.

[c] Presumably vessels reflagged in St. Vincent.

Table 2.--THE GAMBIA. Vessels arrested and penalties imposed for contravention of Fisheries Act regulations between July 1987 and June 1992.

Reason	Vessels arrested	Penalties imposed
	Number	*US$1.00*
Fishing without a license	14	713,028
Fishing in wrong zone	12	131,433
Wrong mesh size	24	283,733
Improper storage of gear	1	236
Transshipment on the highseas	2	64,320
TOTAL	53	1,210,790

Source: "World Fishing Fleet Study," U.S. Embassy, Banjul, The Gambia, June 29, 1993

The Gambia

75 km

Boundary representation is not necessarily authoritative

4

KENYA

The U.S. Embassy in Nairobi, Kenya, prepared the following report on the fisheries of Kenya. The report has been edited only slightly to help it conform to other country reports.[5]

1. General Background

Kenya's Director of Fisheries, Mr. P. N. Kamande, notes that the Government of Kenya practices a conservationist fishing policy and has, in recent years, not licensed any foreign fishing vessels within the country's 200-mile Exclusive Economic Zone (EEZ) off Kenya's Indian Ocean coastline. Kenya's participation in marine fishing is small due to lack of competitive technology, equipment, and quality control programs for deep-sea fishing. In 1992, a total of 8,871 tons of marine fish were landed compared to 183,779 tons of inland freshwater fish.

2. Regulations

Conditions of license are determined by the director of fisheries as provided for in the legislation. These include specifying fishing grounds, species and fishing gear. The access arrangements are simple and do not require permanent transfer shifting ownership and registration of foreign vessels to Kenya.

3. International Agreements

Kenya has not signed any bilateral fishery agreements. Kenya is among the ten Indian Ocean member countries who have signed a memorandum of understanding for the formation of a West Indian Ocean Tuna Management Commission (WIOTMC). The other countries are Madagascar, Tanzania, Seychelles, Comoros, Mauritius, Mozambique, Maldives, Sri Lanka, and India. WIOTMC seeks to coordinate protection and development of marine resources in the region, conduct scientific surveys and solicit external funding for its activities.

4. Aid Programs

There are no marine fishery aid programs in Kenya. The Fisheries Director expressed the Government's desire to receive donor funding for improving surveillance capability in Kenya's 200-nautical-mile zone. Funding on a regional basis would be more effective.

5. Shipbuilding

Kenya's shipbuilding industry is quite small and limited primarily to repairs and dry-docking. There are only two major shipbuilding companies, both located in Mombasa. There are no special provisions for importing new or used fishing vessels into Kenya.

6. Foreign Fishing

Foreign fleets wishing to operate in Kenya's territorial waters have to obtain a license from the Director of Fisheries after paying a fee of $20,000. Royalties are determined as a percentage of the total catch and a non-reimbursable fee of $20,000 per vessel is required. A license will be granted if the country has a bilateral fisheries agreement with Kenya and a local representative has been appointed.

The Director of Fisheries reports that several ships are operating both inside and outside Kenyan waters, including the Spanish tuna fleet, and fishing vessels from Korea, Taiwan and Japan.

7. Transshipments

Mombasa serves as a transshipment point for a Spanish fleet based in the Seychelles.

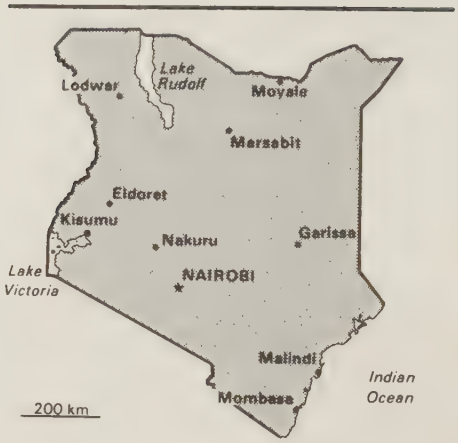
8. Joint Ventures

Kenya does not have any joint ventures with foreign fishing vessels.

9. Enforcement

Due to lack of surveillance capability, Kenya cannot monitor foreign fishing inside Kenya's 200-mile EEZ. The Director of Kenya's Fisheries Ministry stated that most of the ships operating legally are licensed out of the Seychelles. No vessels have been seized in recent years and no fines have been levied. Poaching is, however, common because Kenya lacks the surveillance capability to monitor these activities. The Government of Kenya has not been able to seize any unlicensed fishing vessels in recent years.

Kenya



5

MAURITANIA

The U.S. Embassy in Nouakchott, Mauritania, prepared the following report on the fisheries of Mauritania. The report has been edited only slightly to help it conform to other country reports.[6]

1. General Background

Mauritania has some of Africa's most abundant fisheries along its 525-kilometer coast. Until 1978, the country's waters were fished almost exclusively by foreign-controlled companies, which generally processed their catches on the high-seas and unloaded them abroad. In 1979, the Government of Mauritania inaugurated a new fishing policy to gain control of the harvesting and processing of the country's fishing resources. As a result, licensing of foreign firms has mostly been replaced by the creation of Mauritanian-controlled fishing companies and joint ventures. In the 1980s, the Mauritanian fishing industry grew to become the most critical sector in the country's economy. The main species fished in Mauritanian waters are classified in the following groups:

- Cephalopods (octopus, cuttlefish and squid)
- Continental shelf (hakes, lobster, and shrimps)
- Pelagic resources (mackerel and sardines)
- Yellowfin and big-eye tuna

In October 1992, the Mauritanian industrial fishing fleet consisted of 263 vessels, as follows:

- 149 vessels possessing permits, including 106 vessels with freezers and 43 vessels with refrigerators.

- 114 chartered vessels, including 70 vessels with freezers and 44 vessels with refrigerators.

2. Licensing

Until 1979, there was no meaningful regulation of the fishing sector. The only way for the country to obtain the benefit of the hard currency generated by the fishing sector was by selling licenses. At that time, individual vessels were licensed. Accordingly, an operator could obtain several licenses. This practice came to be viewed as prejudicial to Mauritania's national interest and the government decided to limit the sales of licenses. The specific regulations of fishing by foreign fleets are elaborated in the protocol agreement between Mauritania and each partner. However, in 1987, the Ministry of Fisheries and Maritime Economy and the Ministry of Finance drew up a document defining a new sectoral development strategy aimed at promoting the rational use of Mauritania's marine resources and protecting the marine environment.

3. International Agreements

From 1987 to 1992, the Mauritanian government signed two fishery agreements, one with the European Community (EC) and the other with Japan. These agreements facilitated increased fish production during this period, The Government of Mauritania and the Government of the Ukraine signed and agreement in April 1993. The Government of Mauritania recently renewed its agreement with the EC for the period August 1993-July 1996 for approximately 100 EC-flag fishing vessels. The highlights of the Mauritania-EC Fishery Agreement are as follows:

Specialized vessels (maximum catches allowed):

- fishing vessels specializing in crustaceans, with the exception of lobsters: 10,000 tons per month annual average.

- black hake trawlers and bottom longliners: 15,000 tons per month annual average.

- pelagic trawlers and seiners: 9,000 tons per month annual average.

Vessels with licenses for lobster fishing may keep on board no fishing gear other than baskets. These vessels are not authorized for live-bait fishing. In addition, lobster fishing is prohibited between July 1 and September 30 of each year, since this is the height of the spawning season for lobsters.

Vessels fishing for highly migratory species (number of vessels allowed):

- 38 pole-and-line tuna vessels and surface longliners.

- 25 freezer tuna seiners:

Authorized mesh sizes:

The minimum mesh sizes authorized as follows:

- Fishing vessels specializing in harvesting crustaceans with the exception of lobster: 40 centimeters (cm).

- Black hake trawlers: 60 cm.

- Pelagic seiners: 20 cm.

- Pelagic trawlers: 30 cm.

- Pole-and-line tuna vessels fishing with live bait: 8 cm.

The financial compensation to the Government of Mauritania under the agreement for the three-year period amounts to approximately $32.9 million, payable in three annual installments. In addition, the EC is required to contribute approximately $1.1 million towards the financing of the Government of Mauritania's fishery development programs. The EC also undertook to provide training in fisheries at a cost of $426,960.

The following are the conditions for fishing by EC vessels in Mauritania's waters:

- The EC Commission will present to the Mauritanian fishery authorities an application for each vessel, drawn up by shipowners seeking authorization to fish under the agreement.

- Before receiving a license, each vessel, with the exception of freezer tuna seiners, must enter the Port of Nouadhibou for inspection.

- Licenses are issued to a given vessel for twelve months.

- The fee to be paid to the Government of Mauritania by the shipowners is set at approximately $23.72 per ton of fish caught within the Mauritanian fishing zone.

- All vessels, authorized to fish in Mauritania's fishing zone under the agreement, with the exception of tuna vessels and longliners, are obliged to report their catch.

- With the exception of freezer tuna seiners, owners of EC vessels operating in Mauritania's fishing zone must employ crews whose composition is at least one-fourth Mauritanian. Shipowners are free to choose which Mauritanian sailor they take on board their vessel.

In the event of the seizure or detention, under the terms of the applicable Mauritanian legislation, of a fishing vessel flying the flag of an EC member state, the EC representative is notified within 48 hours.

4. Joint Ventures

The following are among the joint ventures established under Mauritania's 1979 law encouraging investments in the fishing sector:

- SALIMAUREM (*Société Arabe Libyenne Mauritanienne des ressources maritimes)*, a Libyan-Mauritanian venture.

- SIMAR (*Société Industrielle Mauritano-Roumaine*), a Mauritanian-Romanian venture that ceased operation in early 1993.

- MAUSOV (*Mauritano-Soviétique des pêches*), a Russian-Mauritanian venture.

- ALMAP (*Algéro-Mauritanienne des pêches*) an Algerian-Mauritanian venture.

- MTP (*Mauritano-Tunisienne des pêches*), a Tunisian-Mauritanian venture.

- COMACOP (*Compagnie Mauritano-Coréenne de pêche*), a South Korean-Mauritanian venture.

- SIPECO (*Société Internationale de pêche et de commerce*), a French-Mauritanian venture.

- Mauritanian-Chinese Company

These joint ventures are governed by agreements and various regulations. The joint-venture agreements stipulate that 51 percent of capital is be owned by Mauritanian shareholders, but that the management and technical services be furnished by the foreign shareholders. The vessels involved in these companies are differentiated by fishing methods and specialty. Both freezer and refrigerator vessels are operating to catch pelagic fish (surface species), demersal fish (deep-sea species), and cephalopods (mainly octopus and squid).

- For MAUSOV, SIMAR and SIPECO, the vessels involved are the "Super-Atlantic" freezer vessels specializing in pelagic fish. These trawlers are from 80- to 100-meters in length. The conditions under which MAUSOV operates are: one third of the catch for the Mauritanian side (given in cash or in fish) and two thirds for the Russian side.

- For SALIMUREM and ALMAP, the vessels involved are the refrigerator vessels specialized in demersal fish (deep-sea species) and cephalopods (mainly squid).

In September 1991, a total of 65 vessels were operating in Mauritanian waters under joint venture agreements. Besides SIMAR, it is expected that other joint ventures will also close due to the crisis in Mauritania's fishing sector. After two or three years of profits, the rate of return on investment in these ventures starts to decrease and eventually became negative. Some of the causes of this situation are the high cost of operation, which generates heavy losses, and the mismanagement associated with poorly qualified workers. Over the long term, many observers believe that the outlook for joint ventures with East European countries is bleak, because the subsidized fuel that these former states provided for vessel operation is no longer available.

5. Aid Programs

Mauritania's principal aid donors (France, Germany, Japan and Spain) and international organizations (African Development Fund, European Development Fund, Arab Fund for Social and Economic Development, World Bank), have extended loans to the country's fishing sector. The following are among the projects financed by international donors:

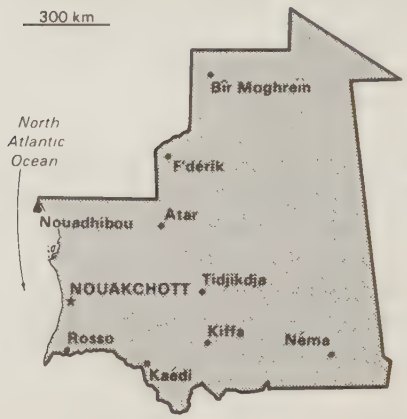
- Development of "Imraguen Banc D'Arguin," a fishery located between Nouakchott and Nouadibou, financed by UNDP.

- Coastal surveillance program, financed by Germany and France.

- Traditional fishing development, financed by the Arab fund.

- Rehabilitation of "Baie Du Repos," a fishery located along the Northern Mauritanian coast, financed by the Arab fund.

Mauritania



6. Shipyards

There is no shipbuilding in Mauritania. In the 1980s, the Government of Mauritania promoted imports of fishing vessels by encouraging local banks to finance vessel purchases. However, many vessel owners have been unable to repay their bank loans, and this has caused major losses in Mauritania's banking sector. Presently, Mauritanian commercial banks are unable to finance the repair of damaged vessels, and a large part of the fleet is paralyzed.

7. Transshipments

Mauritanian ports are not used as supply or transshipment points for distant water fleets.

8. Enforcement

The Government of Mauritania has only a limited capability to control and regulate foreign fishing. The Mauritanian coast is inadequately policed, with the result that over-fishing is widespread. Industrial demersal fishing vessels make frequent incursions into the zone reserved for artisanal fisheries. A World Bank-financed project for supervision and control was implemented, but the even application of sanctions for violations remains a problem. From 1988 to 1992, among 1,340 infractions registered, only 658 cases (approximately 47 percent) were actually acted upon by the commission responsible for imposing sanctions. The highest percentage of cases handled (68 percent) involved the less serious infractions--for example, violations of crewing regulations and expiration of a vessel's "safety certificate." The more serious infractions -- for example, of regulations of size of catch and mesh size of nets -- represented only 32 percent of total infractions reaching the commission. In this period, the Government of Mauritania imposed fines totalling approximately $5 million, but of this amount only $3 million has been paid.

6

MOROCCO

The U.S. Consulate General in Casablanca, Morocco, prepared the following report on the fisheries of Morocco. The report has been edited only slightly to help it conform to other country reports.[7]

1. Regulations on Fishing

There are no general regulations covering fishing by foreign fleets in Moroccan waters. Vessels fishing in Moroccan waters must be licensed by the Government of Morocco. There are separate license categories according to the fishing method to be used (e.g., long line, seiner trawling). Licenses are issued to specific vessels. No new ones are being issued, although foreigners can obtain a license by buying a licensed Moroccan vessel. Fleets from specific countries are governed by bilateral agreements.

2. International Agreements

■ European Community (EC)

The most important foreign fishing fleet in Moroccan waters is the EC fleet, composed almost entirely of Spanish vessels. Morocco renewed its four-year fisheries accord with the EC on May 15, 1992. The new accord, which modestly reduced total EC tonnage and licenses, substantially increased the annual payment, imposed a two-month annual fishing ban on coastal and high-seas fisheries, and strengthened enforcement provisions. The agreement was linked, during the negotiations, to the signing of a new 4-year EC-Morocco financial protocol for $660 million ($165 millon a year). The EC will get permits for around 600 vessels (down from 730), including 143 high-seas licenses (140 Spanish, three Greek). Most of the vessels are small trawlers. There is a quota of 28 licenses for tuna vessels.

Other provisions include a mid-term review in 1994, with the ability for Morocco to suspend licenses for fishing rules violators. There will be a continuation of the preferential marketing arrangement for Moroccan canned fish, unlimited amounts of which will enter the EC duty-free after 1996. The EC will provide a $7 million credit for training. A new feature in the 1992 agreement is Morocco's right to station as many as 300 fishery observers aboard EC vessels. Around 85 observers were hired by March 1993.

■ Japan

Since 1985, Morocco and Japan have annually renewed a bilateral fishing treaty. The August 1992 agreement allows up to 30 Japanese tuna vessels to follow the northward tuna migration along the Moroccan coast each year. Tonnages are minimal but Moroccan authorities believe that there is a fairly important by-catch of more valuable species. According to the terms of the 1992 Agreement, the Japanese will pay $6,500 per vessel for three months

of fishing, about twice as much as they had paid in past years.

■ Former Soviet Union

The 1991-92 breakup of the Soviet Union removed a major headache for the Moroccan fisheries Ministry and a major drain on Morocco's fisheries. Not only had the once-mighty Soviet fleet fished with near impunity in Moroccan waters, taking as much a 1.2 millon tons a year, but Soviet submarines sometimes engaged in faceoffs with Moroccan frigates. By August 1992, the Government of Morocco signed a highly advantageous three-year agreement with Russia, while choosing not to negotiate agreements with the Ukraine and the Baltic States. The defunct Soviet accord had set quotas for pelagic fishing of up to 850,000 tons diminishing over several years to 600,000 tons a year within Morocco's 200-mile EEZ. Some Moroccans claimed at the time that the rapacious techniques used by the giant 100-odd Soviet factory ships were denuding the fishery. They further charged that the Soviets were hauling in large quantities of cephalopods, which they had no legal right to fish.

The new three-year Morocco-Russia accord allows 43 vessels, the number to decrease by five vessels a year, to net 400,000 tons of pelagic fish only (sardines and mackerel) a year, the amount to decrease by 50,000 tons a year. Russia must pay Morocco 17.5 percent of the market value of the fish, payable in hard currency or in fish. The accord allows Moroccan inspectors to accompany Russian fishing vessels at sea and provides for the employment of up to nine Moroccan seamen per vessel, creating 350 jobs in all. Morocco gained the right to station two observers on board each Russian vessel. There is also an unwritten understanding that the Russian will do most of their shopping, loading and unloading at Moroccan ports.

3. Joint Ventures

Following the "Moroccanization" of the fishing industry (along with the rest of the economy), the Moroccan fleet essentially became Moroccan-owned and previous joint-venture vessels were transferred to Moroccans. Foreign vessels were licensed under bilateral agreements. The Moroccanization decrees were later abrogated, and it is now possible for foreign firms to invest directly or as part of a joint venture in Moroccan industries, including fishing. Some vessels are jointly owned by Moroccans and foreign interests. The U.S. Embassy does not have comprehensive information on joint industrial ventures, but is aware of two surimi projects. In April 1988, Japanese aid workers launched a pilot project in Agadir to study the feasibility of producing surimi from a Moroccan sardine base. Morocco hopes to divert some of the sardine catch now used in producing low-value fish meal to surimi production for eventual export to Europe and the United States. The project has been slow in starting up, faced with lack of demand for surimi in Moroccan test markets and the disappearance of much of the sardine catch from the port of Agadir. A commercial, French-run surimi plant was operating in Agadir in 1992, marketing its output in France, and presumably making a profit. In 1992, a Russian-Moroccan company was created to market the output of Russian fishermen and their Moroccan partners.

4. Aid Programs

The new EC agreement increases the EC's annual payment to Morocco to $80 million, in addition to fees to be paid by individual shipowners based on profitability.

Japanese aid in grant money and technical assistance to Morocco has been substantial. In 1985 Japan donated a research vessel to the Institut Scientifique des Pêches Maritimes (ISPM) in Casablanca. In 1986, Japan extended aid to build and partially staff a four-year training school for bridge personnel and engineers in Agadir called the Institute of Maritime Fisheries Technology, which opened in the spring of 1988. Agreement was reached on financing a ship repair yard in Agadir, where work was completed in December 1992. In 1992, Japan contributed about $4 million in technical aid to Morocco.

U.S. technical assistance to Morocco in the fisheries field has kept a low profile in recent years. The Moroccan-U.S. Joint Committee of Experts in Fishery Affairs has not met since 1986. Nonetheless, aid has financed small private sector training projects, International Executive Service Corps volunteers have consulted in the canning industry, and Peace Corps volunteers have worked with the Office National des Pêches.

The Canadian International Development Agency sponsored an exhibit in Casablanca entitled "Maritime Fisheries and Ancillary Industries" in March 1990 which featured Canadian fisheries technology and expertise. In 1991, the agency held a fisheries seminar in Casablanca for West African countries. Canada has granted three years of technical assistance to the scientific maritime fisheries institute (ISPM) to improve Moroccan fisheries statistics. A Canadian team recently participated in a study on the feasibility of the now-established Saidia Aquaculture industry near Saidia, at the Algerian border. The only new project under consideration at the moment is for satellite imaging to aid in fisheries enforcement.

5. Shipbuilding

The shipbuilding industry in Morocco is primarily limited to wooden sardine vessels. These ships are built in several places in Morocco, most notably Essouira. Most of the metal hulled vessels, including the stern trawlers, had once belonged to Spanish-Moroccan joint ventures. Ownership has now been transferred to Moroccans. No new fishing licenses are being issued. Despite this, the local shipbuilding industry has continued to produce wooden sardine vessels in the hope of obtaining exceptions. There is no incentive to import fishing vessels.

6. Transshipments

Most of the domestic fleet now operates out of Agadir, where it was "repatriated." Despite the repatriation, the Spanish port of Las Palmas in the Canary Islands continues to play an important role in Moroccan fisheries. EC trawlers continue to unload significant amounts of fish (mainly cephalopods) caught in Moroccan waters in Las Palmas, out of sight of Government of Morocco officials.

7. Moroccan High-seas Fleet

The high-seas fleet counts about 60 active companies with some 450 stern freezer-trawlers costing $2-3 million apiece, weighing 300-350 tons each, and averaging 12 years old. Vessels are generally 30 - 45 meters in length, with steel hulls. Many of these vessels at one time belonged to Spanish-Moroccan joint ventures but now most have passed to Moroccan ownership. Voyages last one to three months, with mostly Korean and Chinese crews. A "Moroccanization" edict was technically in effect as of January 1, 1993, requiring vessel owners to hire at least 50 percent Moroccan crews. The Moroccan government aims for 65 percent Moroccan crews by 1996.

Counting the 140-odd EC trawlers, the total fleet in Morocco's EEZ approaches 600 trawlers in a fishery which some experts claim can optimally support only half that number. By December 1992, around 70 of 450 Moroccan high seas trawlers were inactive because their owners could no longer afford to operate them. The Government of Morocco apparently hopes to avert an industry shakeout by its February 1992 announcement of financial aid for the troubled trawler companies.

The Moroccan high-seas fleet registered big gains in 1991, producing an 11 percent larger catch compared with the previous year (147, 838 tons versus. 133, 396 tons) that fetched 17 percent more in the marketplace (2.72 billion Dirham compared with the 2.33 billion Dirham 1990 catch). The high-seas catch (cephalopods and whitefish) is the most valuable part of the total catch, representing 30 percent of tonnage but 64 percent of the total value of Morocco's fisheries production.

Around two-thirds of the 1991 high-seas catch was cephalopods (squid, octopus, and cuttlefish), almost none of which are consumed locally. Morocco produced 58 percent more cephalopods by weight in 1991 compared with 1990 (97,246 tons versus. 61, 519 tons). The bigger catch yielded a 55 percent rise in value (2.73 billion versus. 1.76 billion), which is more money than Morocco earned on sardine and fresh fish exports combined.

The showpiece of Morocco's high seas fishing industry is the Omnium Marocain de Pêche (OMP) fleet at Tan Tan, where OMP owns and operates its own port facilities. The complex stands on a site that 10 years ago was undeveloped desert. Since 1987, when most of Morocco's fleet was still based in Las Palmas, OMP and its subsidiaries have been landing catches, taking on provisions, and effecting repairs exclusively in Morocco. With 42 trawlers, OMP and its subsidiaries processed 16,000 tons of fresh fish and cephalopods in Africa. The firm earned $33 million in fish exports in 1991, or 5.5 percent of the national total. The firm wants to add on-shore fish processing capacity to enhance profitability.

Morocco

8. Enforcement

Under the terms of the new agreement with the EC, the Moroccans will place observers aboard most of the EC vessels fishing in Moroccan waters. All the vessels fishing for cephalopods in the Atlantic will be covered full time; the tuna vessels in the Atlantic fishing for only four months out of a year will be covered randomly. There will be only very limited coverage of vessels fishing in the Mediterranean since they are mostly very small family owned vessels. There will be up to two scientific observers on each EC vessel, plus up to 6 Moroccan nationals (depending on the vessel's dead weight), to be hired freely by the skippers. Morocco currently has about 40 trained scientific observers who have the equivalent of a post-graduate degree with a specialty in fisheries. The Ministry of Fisheries estimates that it will be able to do the job with an observer force of around 300.

In addition to the 300 observers, the Fisheries Ministry will have to recruit, train and organize the land based infrastructure both to manage the organization of the observers (i.e. scheduling, transport, payroll, etc.) and to process the data that they will generate. Each vessel will be on a radio net based in the Ministry and will feed in daily data on the vessel's catch. It will be necessary to develop computer programs to analyze and store the mountains of data that will be generated so that the policy level can use it to draw conclusions and make decisions. The whole operation will be financed by revenues coming from the fisheries agreement and by fines levied on pirate vessels.

Poaching by non-licensed vessels is a major concern for the Government of Morocco. Enforcement was recently improved through the acquisition of three new British-built spotter aircraft which can call for help from the Navy and through better coordination and targeting. The Ministry has been coordinating enforcement activities based on knowledge of seasonal fishing patterns so that naval vessels now look where poachers are likely to be operating rather than cruising randomly in Moroccan waters. Part of the money taken in on the EC agreement is to remain with the government to finance continued expansion of enforcement capabilities.

7

NAMIBIA

The U.S. Embassy in Windhoek, Namibia, prepared the following report on the fisheries of Namibia. The report has been altered only slightly to help it conform to other country reports.[8]

1. General Background

Prior to Namibian independence in 1990, there was virtually no deep-sea fishing industry operating out of Luderitz or the Walvis Bay enclave. Namibia is currently developing a high-seas fishing fleet capable of supplanting foreign high-seas fishing fleets within the nation's 200-mile Exclusive Economic Zone (EEZ). With emphasis on shore processing, however, Namibia is not developing a high-seas fleet of its own. Except in the case of foreign companies, seeking access to Namibia's coastal fishing grounds, Namibia has not yet become a flag-of-convenience state for foreign fishing fleets.

2. Licensing

Namibian government policy discriminates against licensing foreign-based distant-water fishing vessels, since it prefers to provide quotas to local concessionaires. Given the shortage of locally-owned vessels and on-shore processing facilities, however, most deep- and mid-water concession holders currently charter foreign-owned or operated factory ships, typically Russian in the case of mid-water vessels, or Spanish in the case of demersal vessels. During the 1986-1988 period, immediately prior to Namibia's independence, the USSR and Portugal caught 88 percent of the hake off the Namibian coast, while the USSR, Romania, Bulgaria, Cuba, Spain, and Poland caught 78 percent of the horse mackerel.

As of June 1993, there were 80 companies (many with overlapping ownership) holding 95 concessions to fish for horse-mackerel (mid-water trawl), pilchards (pelagic or surface water), hake (demersal or bottom trawl), tuna, and other species. Most of the companies are registered in Walvis Bay or Windhoek, but many have some foreign ownership. There are 149 vessels licensed to operate in the Namibian 200-mile fishing zone (190 including the pelagic fleet, but excluding lobster vessels), up from 99 in 1991 (137 including the pelagic fleet).

3. International Agreements

The Government of Namibia has yet to complete any fishing agreements. Protracted negotiations with the European Community are under way,[9] with Namibia pressing the EC for an agreement that emphasizes joint ventures.

4. Joint Ventures

Due to the government's "Namibianization" policy, joint ventures between foreign fishing firms and local entrepreneurs are common. Moreover, many Namibian concessionaires effectively sell their

quotas to foreigners by chartering foreign-owned and operated vessels. The increasingly complex structure of interlocking front companies makes ultimate company ownership difficult to identify. Given the fact that Namibia was under South African administration until 1990 (the fishing Port of Walvis bay still is), South African commercial interests permeate the Namibian fishing industry. Spanish, Portuguese, and Norwegian interests are also common. Russian vessels, chartered at low rates, dominate the horse-mackerel fishery.

Among the more prominent foreign interests are Pescanova (Spanish) and Nandamsea-Namfish-Northern Fishing Industries-Blue Sea (part Norwegian) in demersal fishing, United Fishing Enterprises (part Norwegian via Namsea-Namfish) and Kuiseb Fish Products (I&J of South Africa) in pelagic fishing, Sovrybflot (Russian) and Pescanova (Spanish) in horse-mackerel fishing, and the SA Tuna Association (South Africa) in tuna fishing. The embassy is not aware of any American involvement in the Namibian fishing industry. Wickford Corporation of New York applied on its own for a 1993 horse-mackerel quota, but failed to receive a license. (Only enterprises with Namibian joint venture partners were granted concessions as new entrants in 1993.)

5. Aid Programs

Norway has been very involved in providing enforcement and scientific assistance to Namibia's fishing sector. Iceland has also provided technical support. The EC would be willing to provide Namibia with enforcement equipment and technical expertise, once a fishing agreement between the EC and Namibia is concluded. The biodiversity program of the U.S. Department of Defense has allowed $2.7 million for small surveillance aircraft and communications equipment for the Namibian Government to use in safeguarding its marine resources. Kuwait has expressed interest in helping to build a new fishing harbor on the north coast.

6. Shipbuilding

There is no local shipbuilding industry. Walvis Bay has drydock facilities for repairs. Imported vessels are subject to the tariffs of the South African-administered Southern African Customs Union.

7. Transshipments

Walvis Bay services distant-water fleets.

8. Namibian High-seas Fishing

While 88 percent of the demersal fleet operates under the Namibian flag, 61 percent are actually freezer trawlers that carry their catch back to Spain or other foreign markets. The rest are wet-fish trawlers that service the growing on-shore processing industry. Nearly all the mid-water trawling fleet, which accounts for 76 percent of total licensed fishing fleet tonnage, appears to be ex-Soviet distant-water vessels. Most of these are chartered by local concessionaires. A recognizable Russian company, Sovrybflot, charters 12 of the mid-water trawlers. The tuna fleet is based primarily in South Africa. There are no distant-water vessels involved in the Pilchard Fishery and the Walvis Bay pelagic fleet is now all-Namibian registered.

9. Enforcement

With foreign assistance, Namibia is building a capability to monitor and control foreign fishing. Prior to independence, up to 300 foreign demersal and mid-water vessels at the time reportedly fished off the Namibian coast, nearly exhausting stocks of hake and other species. After the proclamation of the 200-mile fishing zone, in April 1990, the number of unlicensed fishing vessels fell by approximately 90 percent. Over the past three years, ten Spanish or Spanish-owned fishing vessels have been seized by the Government of Namibia for illegal fishing, reducing the attractiveness of Namibian waters to unlicensed vessels.

Namibia

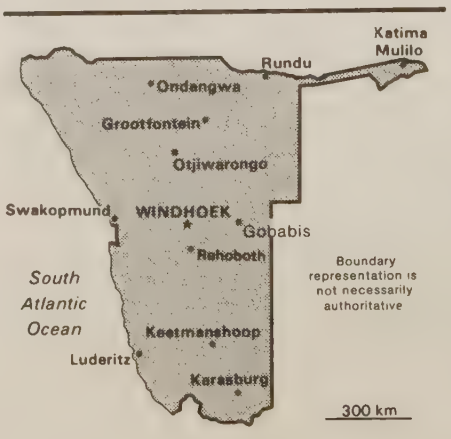


Table 1.--NAMIBIA. Data on licensed fishing vessels, 1993.

Type of fishing	Number of licensed vessels				Tonnage
	Foreign	Charter'	Freezer	Total	
	Number of vessels				*Gross Registered Tons*
DEMERSAL:					
110-mm mesh	7	22	27	56	27,465
75-mm mesh	0	2	12	14	1,721
Longline	1	1	-	2	2,444
MID-WATER TRAWL	42	42	-	84	192,226
TUNA:					
Pole-and-Line	19	20	-	39	3,666
Longline	7	7	-	14	1,234
LINEFISH:	11	1	-	12	692
PELAGIC (purse-seine):	41	-	-	41	10,314
TOTAL:	128	95	39	262	239,762

SOURCE: Ministry of Fisheries and Marine Resources. Note: "Foreign" indicates the number of vessels that are registered under a foreign flag; the rest are Namibian-registered, but may still be foreign-owned and based. "Chartered" indicates the number of vessels used by concessionaires lacking sufficient vessels of their own to exploit their quotas. Such vessels are often, but not necessarily, foreign registered. For the demersal fleet, "freezer" indicates the number of freezer factory ships; the rest are "wet-fish" vessels supplying on-shore processing factories. The number of freezer ships is a more reliable estimate of the size of the distant-water demersal fleet than country of registration.

8

NIGERIA

The U.S.Embassy in Lagos, Nigeria, prepared the following report on the fisheries of Nigeria. The report has been edited only slightly to help it conform to other country reports.[10]

1. Regulations

Fishing in territorial waters is reserved for Nigerian-flag vessels. A Nigerian vessel is defined as one belonging to a company whose capital is no less than 50-percent African ownership. Theoretically, foreign fishing is allowed only for joint ventures with at least a 51-percent Nigerian interest, though in practice this requirement is waived when there is substantial Nigerian interest in the company. Foreign flag vessels may be licensed to fish only outside the Nigerian Exclusive Economic Zone (EEZ), but they may land fish in Nigeria.

Business permits and fishing licenses are required for all companies operating within Nigeria's 200-mile EEZ. To obtain a fishing license, a company must first secure approval from the Industrial Development Coordinating Committee of the Ministry of Industries in Abuja. The applicant must then apply to the Ministry of Transport for registration of fishing vessels. Finally, all approvals and documents must be submitted to the Department of Fisheries, Ministry of Agriculture, for granting of the license (table 1).

2. International Agreements

Nigeria is a member of the Commission for the Eastern Central Atlantic Fisheries (CECAF). Nigeria also has fishing agreements with three African countries, Equatorial Guinea, Angola, and Sierra Leone which allow Nigerian vessels to register to fish in the participating country's national waters.

Equatorial Guinea: A five-year agreement, renewed with Equatorial Guinea in 1991, allows 17 Nigerian trawlers to fish in its waters in exchange for 50 tons of fish per year per vessel given to the Equatorial Guinean government. The Government of Equatorial Guinea negotiated this requirement to provide fish for its local market, as it does not have an offshore fishing industry of its own.

Sierra Leone: Nigeria's agreement with Sierra Leone, allowing for 12 Nigerian vessels to fish the Sierra Leonean waters is a reciprocal agreement though Sierra Leone is not currently exercising its right to fish Nigerian waters.

Angola: Nigeria's 1989 agreement with Angola allows the licensing of four Nigerian vessels with a minimum length of 50 meters. This requirement virtually nullifies the agreement since Nigeria does not currently operate trawlers of this size.

Currently, Nigerian vessels are only fishing in Equatorial Guinea's waters, as well as in local waters. Federal Department of Fisheries (FDF) officials say that no negotiations over reciprocal fishing agreements have taken place with any of the major fishing powers (i.e. Japan, Russia, Norway, or the EC).

3. Fleet Background

The Nigerian commercial fishing sector is dominated by five large companies. Together they own approximately 60 percent of the majority of all other companies, which own fewer than five trawlers each. Most companies are located in Lagos, but several operate from Port Harcourt, Warri, and Calabar.

The Federal Department of Fisheries (FDF) reports that registration of the inshore and deepwater trawlers peaked in the late 1980's and has been declining since then (table 2). The drop in the inshore fish supply caused by overfishing and the high cost of vessel maintenance and licensing fees contributed to this drop. Rising operational cost and smaller catches force many operators to retire older vessels and not replace them. At any given time, 30 to 40 percent of registered vessels are not in service because of breakdowns or maintenance problems. Spare parts, mostly imported from the United States, are so expensive that retiring and cannibalizing older vessels for spare parts is more economical than ordering new ones.

4. Aid Programs

As of 1992, Japan, Germany, the World Bank (IBRD), the International Fund for Agriculture Development (IFAD), and the United Nations were all operating fishing projects in Nigeria. Brief descriptions of some of the projects are given below.

JAPAN: The Japanese Government provides a 42 meter, 272-gross registered ton vessel to the Nigerian Institute for Oceanography and Marine Research (NIOMR) for use in developing tuna fishing in Nigerian waters. The Japanese government also provides funding for the rehabilitation of the NIOMR pilot canning plant and training school.

IBRD: There is a $27.8 million fisheries component in the $100.9 million third multi-state agricultural development project designed to strengthen extension services and to increase the value of fish production in Lagos, Ondo, and the delta states. This project began operating in 1990 and will be implemented over five years with an emphasis on improving fish production technology and small stock management.

IFAD: A six-year, $6 million loan provides funds for lending to fishermen by the Nigerian Agricultural Development Bank. This project was to have begun by the end of 1992.

5. Shipbuilding

Nigeria has no significant shipbuilding industry. In 1991 and 1992, ship building and repairing equipment were the second largest U.S. exports to Nigeria. Most of the newer commercial vessels operating in Nigeria are built in the United States and the industry seems predisposed toward American products. Nigeria has no special provisions for importing new or used fishing vessels.

6. Enforcement

The government considers illegal fishing a major problem though estimates on the number of illegal vessels in operation are unavailable. Frequent violations include use of illegal undersized mesh nets, fishing without a license, pilferage (black market sale of a percentage of the legal catch transacted at sea by fishing crews), and infringement of a 5-mile, no-trawler zone. Most of these infractions contribute to Nigeria's larger problems of depletion of native fish stocks and degradation of the environment for traditional fishermen. Fishing without a permit in Nigerian waters is punishable with forfeiture of the vessel and detention of the captain, or a fine of about $4,550) payable in foreign currency.

While the FDF has the primary responsibility for enforcement of fishing regulations, it does not have the resources necessary to patrol the waters or apprehend violators. Currently, the FDF must rely on the Nigerian Navy for patrolling the coast and must coordinate with Ministry of Justice in the prosecution of cases. Though the fishing laws were revised in 1992 to require stiffer fines and longer prison terms for fishing violators, a lack of resources prevents the FDF from enforcing the laws effectively. A World Bank loan was granted to the FDF for the procurement of four new patrol vessels, but the vessels have not yet been delivered and, in any case, the FDF lacks the trained personnel necessary to man them.

The most recent conviction for illegal fishing was in late 1991 when a Greek vessel was fined $20,000 for fishing without a license. The captain was found guilty of illegally catching and packaging shrimp in Nigeria and for labeling packages "product of Greece." The value of the shrimp on the vessel was approximately $220,000.

Nigeria

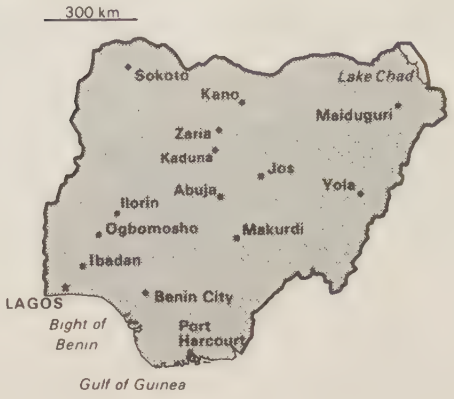


Table 1.--NIGERIA. Licensing tariffs effective January 1, 1991.

Vessel type and tonnage	Annual license fee	Quarterly license fee
	US$1.00[d]	
General fishing vessels:		
Below 20-GRT	$45.47	$13.64
20-GRT to 199-GRT	$113.69	$31,83
Shrimp trawlers:		
All sizes	$181.90	$100.05
Vessels fishing inside Nigeria's EEZ:		
200-GRT to 999-GRT	$363.80	$100.05
High-seas vessels:		
Over 1,000-GRT	$454.75	$136.40
Reefers:		
All sizes	$454.75	$136.40

Source: U.S. Embassy, Lagos, Nigeria, July 2, 1993.

Table 2.--NIGERIA. Estimated number of fishing vessels registered or operating in Nigeria waters, 1988-90.

Year	Inshore trawlers	High-seas trawlers	Artisanal canoes
1988	372	129	77,000
1989	440	109	77,000
1990	317	28	77,000E

Source: Federal Department of Fisheries, Lagos 1990. (E) = Estimate.

[d] Based on an exchange rate of 21.99 Naira per US$1.00 on July 1, 1993.

9

OMAN

The U.S. Embassy in Muscat, Oman, prepared the following report on the fisheries of Oman. The report has been edited only slightly to help it conform to other country reports.[11]

1. General Background [12]

Oman has rich, if underdeveloped, marine resources, which include demersal (such as grouper and emperor fish), small pelagic (sardines), and large pelagic (tuna and kingfish) species. Oman's fisheries wealth is the result of favorable currents and associated migrations of the large pelagic fish. The bulk of Omani fishing is done by traditional fishermen. In 1991, traditional fishing accounted for 88 percent of fish landings, and 79 percent of the total value of fish caught. Government policies encourage Omanis to become fishermen. The size of the local catch is not limited, for instance. The "fishermen's encouragement fund" frequently subsidizes the purchase of new vessels and engines. The ranks of Omani fishermen have swollen to the point that the Ministry of Agriculture and Fisheries estimates 20,000 Omanis are now involved in fishing. As a result of this increase, the shallow waters of Oman's northern coast have become overfished.

2. Fleet Background

Omanis traditionally fish from locally-made vessels (dhows, houris and shashas) ranging from four to twelve meters in length. These vessels are still used in small numbers, but are powered by outboard motors. Nowadays, eighty percent of local fishermen use faster, foreign-made, fiberglass skiffs. The Ministries of Commerce and of Industry and Agriculture and Fisheries have plans to jointly sponsor a project to provide local fishermen access to larger vessels. The plan calls for fiberglass hulls to be constructed in Oman, with motors to be imported from abroad. The vessels will come in two sizes: 1-3 tons, and 10-15 tons. These craft will have greater fishhold capacity then the vessels currently used, as well as refrigeration capability, and will allow Omani fishermen to spend longer periods (3-5 days) at sea. The fishermen are currently restricted to day trips only.

3. Fishing Licenses

The Government of Oman in 1991 granted 5 Omani companies block quotas for industrial fishing. The licenses were granted as follows: Oman Fisheries Company (5 trawlers), Protein Produce International (8 longliners), Gulf of Oman (2 trawlers), Oman Sea Company (3 trawlers), and Sadah Marine (1 trawler). These companies parcel out their licenses to foreign fishers in return for a percentage of the catch. Twelve percent of the total catch is also retained by the Omani Government as a royalty or licensing fee.

4. International Agreements

Oman has no bilateral fisheries agreements, nor does it currently participate in joint fisheries ventures. The Oman Fisheries Company is holding discussions with potential joint venture partners from Spain and the Far East, although any agreement would not go into effect until 1995 at the earliest. The foreign partner would operate vessels hired by the Omanis, while the fisheries company would cover the cost of operations. Omani trainees would learn the business from the foreign nationals manning the vessels.

5. Foreign Fishing

Trawlers: In 1991, a total of fifteen trawlers fished off the coast of Oman. Between 8 and 10 Korean trawlers, fifty meters in length, ply Omani waters at the current time. Total allowable catches for demersal fish are 18,000 metric tons per year. Reported catch for 1991 was 13,111 tons (table 1).[13] The foreign trawlers are prohibited from fishing at depths of less than fifty meters, or within 10 miles of shore (whichever is greater). Oman's Ministry of Agriculture and Fisheries reports that the catches of the foreign trawler fleet have fluctuated between 11,000 tons and 18,000 tons from 1986 to 1991. Total figures for industrial fishing are: 1986 (13,353 tons), 1987 (13,807 tons), 1988 (17,911 tons), 1989 (11,255 tons), 1990 (15,037 tons), and 1991 (13,111 tons). See table 1 for information about species caught by the trawl fleet.

Longliners: Taiwan-registered longliners began fishing Omani waters in 1989. During the 1989-1990 season, as many as 19 longliners fished there. During the 1990-1991 season, only eight longliners were given licenses, and in 1991-1992, eleven licenses were issued. To the consternation of some local fishermen, the Oman Fisheries Company can now grant twenty to fifty licenses to tuna longliners at a time. Those licenses are currently held by Taiwan companies. The longliners mostly target yellowfin tuna, but catch marginal quantities of sailfish, marlin, swordfish, mahi-mahi and shark (table 2). The government limits the total allowable catch of tuna to 35,000 tons per year. The longliners are prohibited from fishing within 20 miles of shore. Questions sometimes arise about how closely these limits are observed. The longliner fishing season runs from September through May.

6. Transshipments

Omani ports serve as transshipment points only for distant-water fleets fishing in Omani waters. The foreign licencees are prohibited from transferring shipment at sea to mother vessels which carry the fish to foreign markets, because the Omanis want to ensure they receive their portion of the catch. Critics of the foreign markets complain that transshipment at sea in fact does take place. Muscat's port, Mina Qaboos, at present can only accommodate four vessels at any one time. The port is currently undergoing expansion.

7. Enforcement

The Ministry of Agriculture and Fisheries places observers on the foreign vessels which fish in Omani waters. In recent months, at least two of the captains of these ships have been deported for overfishing or for using double nets, etc. Other ships have been prohibited from fishing for periods ranging from 30 to 70 days. Critics of the monitoring complain that the observers are poorly trained youth who have little authority and have difficulty communicating both with the ships' captains (because of language barriers) and with the Omani Government (because of poor radio transmission). The United States Agency for International Development (USAID) is in the process of providing training to the observers which should improve their capabilities. While Oman could no doubt benefit from broader and more forceful enforcement, neither the Ministry not the Omani Coast Guard has much scope to expand the surveillance.

8. Aid Programs

Oman signed a fisheries aid agreement with Japan in May 1993. The Japanese will provide the Omanis with a 16-meter long research vessel, send five Japanese fisheries experts to the Ministry of Agriculture and Fisheries, and send 15 Omanis to Japan for training during the course of the program. The Japanese aid program will be carried out over 5 years and was budgeted at $10 million.

The Omani-American Joint Commission, the local arm of USAID, sponsors a training program for employees of the Ministry of Agriculture and Fisheries and the marine science and fisheries center. The training program focuses on methodologies for improving the management of fishery stocks.

Oman

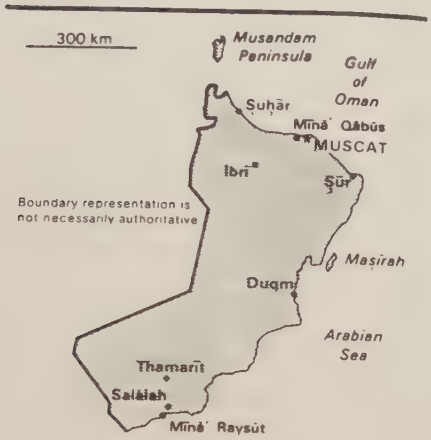


Table 1.--OMAN. Catch by trawlers in Omani waters, 1991.

Species	Catch
	Metric tons
Demersal species:	
Ribbonfish	5,036
Emperors	534
Seabreams	1,345
Rock cod bass	301
Croakers	2,030
Sweet lip/grunts	289
Snappers	22
Butterfly bream	943
Rabbitfish	32
Other demersals	1,197
Sub-total	11,729
Pelagic species:	
Kawakawa	11
Kingfish	16
Barracuda	33
Cobia	3
Large jacks	248
Small jacks	21
Sharks	17
Rays and skates	6
Cuttlefish	1,015
Squid	104
Sub-total	1,474
TOTAL CATCH	13,203

Source: "Oman: World Fishing Fleet Study," U.S. Embassy, Muscat, Oman, June 20, 1993.

Table 2.--OMAN. Catch of tuna and billfish by foreign longliners operating in Omani waters, by fishing season, 1989-91.

Species	Catch	
	1989-90	1990-91
	Metric tons	
Yellowfin tuna	3,818	1,464
Sailfish	37	12
Swordfish	9	2
Shark	50	9
Marlin	3	10
TOTAL	3,917	1,497

Source: "Oman: World Fishing Fleet Study," U.S. Embassy, Muscat, Oman, June 20, 1993.

10

SENEGAL

The U.S. Embassy in Dakar, Senegal, prepared the following report on the fisheries of Senegal. The report has been edited only slightly to help it conform to other country reports.[14]

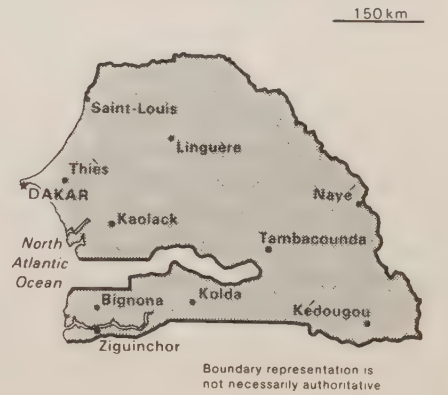
1. Shipbuilding

Senegal has no shipbuilding industry, but there is a state-supported ship repair facility. It is unprofitable and underused. There are no provisions for importing new or used fishing vessels.

2. Enforcement

There is a very limited capability to control and survey the regulated foreign fishing. No seizures have been reported between 1985-1992. The U.S. Government is donating two coastal patrol vessels in 1993-94 to improve enforcement.

Senegal



11

YEMEN

The U.S. Embassy in Sanaa, Yemen, prepared the following report on the fisheries of Yemen. The report has been edited only slightly to help it conform to other country reports.[15]

1. General Background

The Republic of Yemen was established in May 1990 from the merger of the Yemen Arab Republic (North Yemen) and the Peoples Democratic Republic of Yemen (South Yemen). The country has over 2,250 kilometers of coastline, of which 1,550 lies on the Indian Ocean. South Yemen had a long coastline along the Gulf of Aden and operated Soviet-supplied trawlers. It had developed a rudimentary commercial fishery, mainly centered on state-owned corporations based on the Soviet model. The Soviet vessels have all fallen into disrepair and few if any are still operating. Similarly, the large cold storage plants are not operating and the Soviet-styled fishery corporations have been liquidated. With the help of the United Nations Development Fund and bilateral donors, Yemen is attempting to develop a coastal-based labor-intensive artisanal fishery.

Between 1980-84, average fisheries production was 90,000 tons and rose to 104,000 tons from 1985 to 1989. In 1986, peak production was reached totalling 113,200 tons due to increased production by foreign vessels under a catch-sharing agreement with the South Yemen Government in which between 15 to 38 percent of the catch was given to the South Yemen Government. However, production decreased to 77,100 tons in 1990 due to decreased activities of foreign vessels. The average share of catch in 1990 was 40,200 tons to the private sector, 27,300 tons to cooperatives, 3,400 tons to government fishery corporations, and 6,200 tons to foreign investors.

2. Fleet Background

The Republic of Yemen's Ministry of Fishing Resources reports that there are 15 trawlers (100-GRT to 200-GRT) registered in Yemen, but only a few of these are operating. The average age of these vessels is over 10 years. There are approximately 4,000 small, open vessels powered by outboard motors.

3. Shipyards

The only fishing craft built locally are small fiberglass vessels powered by outboard motors.

4. Fishermen and Fish Processors

There are about 25,000 fishermen employed in Yemen's fishing industry and 400 fish-processing workers. The fish-processing workers earn an average of 5,000 Yemeni rials per month ($420 at the official exchange rate, or $110 at the normal market exchange rate)

5. International Agreements

Yemen had agreements with foreign, mainly Korean, companies to fish in its Exclusive Economic Zone (EEZ), but these have expired. Although the Yemeni Government has sought to have these companies commit to joint ventures, they refused. All of the foreign fleet fishing was in the Gulf of Aden. According to the source in Yemen's Ministry of Fish Resources, the government earned about $1.5 to $2 million a year from these agreements. South Yemen had constant problems with the Korean companies, in part because their catches were weighed when they were transshipped at ports in the United Arab Emirates.

Information is not available regarding bilateral fishery agreements which are now in effect. The Soviets reportedly had such agreements with former South Yemen. Yemen continues to face illegal fishing by Egyptian fishermen in Yemen's Red Sea waters. Yemeni ports do not serve as transshipment points for distant-water fleets.

6. Joint Ventures

To date no joint ventures with foreign companies have been established, although the Yemen's Ministry of Fish Resources indicted that the Ministry has received more than fifty inquiries regarding the establishment of joint ventures involving a foreign company. Other inquiries deal with processing and marketing.

7. Aid Programs

Fishery aid programs in recent years have focused on developing labor-intensive artisanal coastal fisheries using small vessels. The World Bank and the Arab Fund have funded fisheries development projects with additional assistance coming from Japan (for purchase of outboard motors, and a shellfish aquaculture laboratory) and the European Community.

8. Shipyards

Several firms are manufacturing fiberglass open vessels designed for artisanal fishing. No Yemen shipyards are building fishing or other vessels. No information is available concerning special provision for importation of new or used fishing vessels.

9. Enforcement

Yemen faces problems of controlling industrial fishing by foreign ships in the Gulf of Aden. Attempts to control it have met with little success because Yemen lacks the resources to mount effective patrols of its EEZ. Yemen's fishery enforcement capability is extremely limited. Most of the recent seizures have been of Egyptian fishermen in the Red Sea. Due to the lack of a fishery patrol capability, the Yemeni Government has little reliable data on the actual extent of distant-water fishing taking place within Yemen's EEZ.

Yemen

APPENDIX

Statistical Tables

Table 1.--AFRICA AND MIDDLE EAST. Fisheries catch, 1980-1992.

Year	Benin	Gambia	Kenya	Mauritania	Morocco	Namibia	Nigeria	Oman	Senegal	Yemen[e]
1980	37,832	13,265	47,723	21,632	330,203	6,550	261,291	79,000	232,752	75,349
1981	37,768	14,068	57,701	60,786	390,505	10,850	260,131	83,650	225,509	68,226
1982	37,521	9,212	81,529	56,288	363,613	11,650	269,712	89,376	229,343	58,131
1983	34,628	11,653	98,138	81,600	453,885	12,100	272,309	108,766	263,534	63,663
1984	35,290	11,882	90,954	93,800	467,485	12,600	263,186	105,200	247,346	65,710
1985	36,371	10,712	105,960	103,300	473,181	13,100	244,490	101,180	246,010	71,310
1986	38,753	13,262	119,798	98,200	595,348	14,100	271,464	96,354	255,570	72,747
1987	41,903	14,646	131,181	99,400	494,085	31,636	260,908	136,149	254,988	72,418
1988	37,267	13,852	138,132	97,600	551,517	32,566	279,387	165,576	260,736	73,156
1989	41,860	19,789	145,403	92,612	520,354	20,297	299,703	117,703	287,104	72,866
1990	41,663	17,862	201,796	91,000	565,521	255,634[f]	316,328	120,239	297,876	77,860
1991	41,000	23,743	198,637	90,000	592,881	204,517	266,562	117,780	319,693	85,261
1992	41,000	23,743	198,483	90,000	592,881	204,517	266,562	117,780	319,693	85,261

[e] Includes the Yemen Arab Republic (North Yemen) and the Peoples Democratic Republic of Yemen (South Yemen) prior to their union as the Yemen Republic in May 1990.

[f] Namibia gained independence in March 1990 and began efishing in its own right while excluding foreign fleets from its waters; this accounts for the sharp increase in landings. Prior to Namibia's independence, much of the catch in it's waters was made by foreign fleets.

APPENDIX

Index

INDEX

Angola . . . 21
Arab Fund for Social and Economic Development . . . 11
Baltic States . . . 14
Belgium . . . 5
Benin . . . 1, 2
Black hake . . . 10
Brazil . . . 5
Bulgaria . . . 17
Canada . . . 14
Canadian International Development Agency . . . 14
Canary Islands . . . 15
China . . . 5
Comoros . . . 7
Cuba . . . 17
Cuttlefish . . . 9, 15, 27
Demersal species . . . 27
EC . . . 3, 9, 10, 13-18, 21
EEZ . . . 1-4, 7, 8, 14, 15, 17, 21, 23, 31, 32
Equatorial Guinea . . . 21
European Community . . . 3, 5, 9, 13, 17, 32
European Development Fund . . . 11
Exclusive Economic Zone . . . 1, 3, 7, 17, 21, 31
France . . . 5, 11, 14
Freezer trawlers . . . 18
Gambia (see The Gambia) . . . 3-6
Ghana . . . 5
Greece . . . 5, 22
Grouper . . . 25
Gulf of Aden . . . 31, 32
Hake (see also black hake) . . . 10, 17, 18
Honduras . . . 5
Iceland . . . 18
Indian Ocean . . . 7, 31
Japan . . . 2, 5, 8, 9, 11, 13, 14, 21, 22, 26, 32
Kenya . . . 7, 8
Kingfish . . . 25, 27
Las Palmas . . . 15
Lobster . . . 2, 4, 9, 10, 17
Longliners . . . 10, 25, 26, 28
Mackerel . . . 9, 14, 17, 18
Madagascar . . . 7
Maldives . . . 7
Mauritania . . . 9-12
Mauritius . . . 7
Mesh . . . 6, 10, 12, 19, 22
Moroccanization . . . 14, 15
Morocco . . . 5, 13-16
Mozambique . . . 7
Namibia . . . 17-19
Nigeria . . . 5, 21-23

North Yemen 31
Norway 18, 21
Oman 25-28
Pelagic species 27
Poland 17
Portugal 5, 17
Republic of Yemen 31
Romania 17
Russia (see alos USSR) 5, 13, 14, 21
Sardines 9, 14, 25
Senegal 3, 5, 29
Seychelles 7, 8
Shrimp 1, 2, 4, 22, 23
Sierra Leone 5, 21
South Africa 18
South Yemen 31, 32
Soviet Union (see also USSR) 13
Sovrybflot 18
Spain 5, 11, 17, 18, 25
Squid 9, 11, 15, 27
Sri Lanka 7
St. Vincent 5
Stern trawlers 15
Taiwan 8, 26
Tanzania 7
The Gambia 3-6
Tuna 2, 4, 7-10, 13, 15, 17-19, 22, 25, 26, 28
U.S. (see also United States) . . . . . i, iii, 1-3, 5-7, 9, 13, 14, 17, 18, 21-23, 25, 27-29, 31
Ukraine 5, 9, 14
United Kingdom 5
United Nations 2, 22, 31
United States (see also U.S.) 2, 5, 14, 22, 26
USAID 2, 26
USSR (see also Russia, Ukraine, Baltic States, and Soviet Union) 17
World Bank 11, 12, 22, 32
Yemen 31, 32

APPENDIX

Maps

Africa

802129 (547147) 3-93

APPENDIX

Endnotes

ENDNOTES

1. See Volume 6, Western Europe and Canada, appendix 25 for details.

BENIN:

2. "Responses to World Fishing Fleet Study," U.S. Embassy Cotonou, July 2, 1993.

THE GAMBIA:

3."World Fishing Fleet Study," U.S.Embassy, Banjul, June 29, 1993.

4. Based on the exchange rate of $1.25 per ECU1.00 for the 4 year period.

KENYA:

5. "World Fishing Study," U.S. Embassy, Nairobi, July 1, 1993.

MAURITANIA:

6. "World Fishing Study- Mauritania," U.S. Embassy, Nouakchott, August 17, 1993.

MOROCCO:

7. "World Fishing Fleet Study," U.S. Consulate General, Casablanca, July 1, 1993.

NAMIBIA:

8. "World Fishing Fleet Study," U.S. Embassy, Windhoek, April 23, 1993 and June 15, 1993.

9. Negotiations were set to resume in September 1993.

NIGERIA:

10. "World Fishing Fleet Study - Nigeria," U.S. Embassy, Lagos, July 2, 1993.

OMAN:

11. "Oman: World Fishing Fleet Study," U.S. Embassy, Muscat, June 20, 1993.

12. The sources used by the U.S. Embassy in preparing itseport on the fisheries of Oman included: *The Fisheries of the Sultanate of Oman, Statistics Yearbook 1991,* Ministry of Agriculture and Fisheries, and Marine Science and Fisheries Center, Muscat.

13. It was not clear if this was entirely the foreign catch, or if it included harvests by Omani vessels.

SENEGAL:

14. "World Fishing Fleet Study," U.S. Embassy, Dakar, June 9, 1993.

YEMEN:

15. "World Fishing Fleet Study -- Yemen," U.S. Embassy, Sanaa, June 30, 1993.